

## **REMARKS**

### **Status of the Claims**

Claims 1-9 are pending. Claims 1-4 are currently amended. New claims 5-9 are added. Reconsideration and allowance of all of the pending claims is respectfully requested.

This amendment does not add new matter to the application as filed. New claims 5-9 are supported, for example, at paragraph [0093] of the specification. New claims 5-9 are also supported, for example, by Examples 1-9, paragraphs [0055]-[0072] of the specification. The amendments to claims 1-4 are editorial, and clarify that the subject matter of the present claims is a fatty acid ester of polyglycerol. The amendments to claims 1-4 do not change the scope of the claims. Accordingly, no new matter is added and entry of this amendment is respectfully requested.

### **Claim Objections**

Claims 1-3 are objected to as being drawn to compounds in a product-by-process format. Claims 1-3 are currently amended to clarify that the claims are compound claims. Withdrawal of this objection is respectfully requested.

### **Claim Rejections – 35 U.S.C. §102**

Claims 1-3 are rejected under 35 U.S.C. §102(b) as being anticipated by JP-07/308560, or JP-08/143513, or JP-08/217723. Applicants respectfully traverse each of these rejections for the following reasons.

*1. The present invention*

Claim 1 of the present invention is directed to fatty acid esters of polyglycerol and includes the following three elements:

- (1.) the polyglycerol has an average degree of polymerization of from 6 to 15 calculated on the basis of the hydroxyl value;
- (2.) the fatty acid is at least one branched fatty acid selected from branched fatty acids having 8 to 22 carbon atoms; and
- (3.) the polyglycerol has a degree of esterification of from 60-90%.

The present invention exhibits numerous superior effects, in particular, excellent water-holding property. Due to the excellent water-holding property, many different types of cosmetics, such as, for example, lipsticks, can be produced. The beneficial effects, e.g., the excellent water-holding property, can be attained only when all of the above mentioned three elements are present. If any one of the recited three elements is not present, a good water-holding property is not attained. Therefore, the present invention is directed to the combination of the three elements recited above.

The superior effects of the present invention are shown by the Examples of the specification, and particularly by the data in Table 1. In addition, applicants herewith submit a **Declaration** by Yasunori Noguchi under 37 C.F.R. §1.132. Applicants respectfully direct the Examiner's attention to the Table in the Noguchi Declaration. In particular, applicants note a comparison between Sample 1 and Sample 11, Sample 16 and Sample 13, and Sample 4 and Sample 5.

Applicants also note that Samples 1, 16, and 4, where element (2) recited above, a straight chain fatty acid is present, exhibit a much higher percentage of water retained than Samples 11, 13 and 5 where element (2) is not present. Applicants further note that all of the Samples include elements (1) and (3).

The Examiner's attention is also directed to Samples 1, 8, and 15. All of these samples are isostearic acid ester and have the same degree of esterification (and acid values), and include elements (2) and (3). However, Sample 1, where the average degree of polymerization of polyglycerol is 10, exhibits a much higher percentage of water held than Samples No. 15 and 8 where the average degree of polymerization is 2 or 4. (Applicants also note that Sample 4 exhibits good percentage of water held.)

Applicants also note a comparison between Samples 2, 3, 16 and 18. All of these samples are isostearic acid ester, and have the same average degree of polymerization (and acid values), and incorporate elements (1) and (2). However, the samples with degrees of esterification within the range of 60-90%, i.e. Samples 2 and 16 exhibit much higher percentages of water held than the samples having degrees of esterification outside of the presently claimed range. See Samples 3 and 18.

Applicants submit that the results discussed above, and shown in the Declaration, clearly demonstrate the fact that the excellent water-holding property of the present invention is attained only when all above three elements (1)-(3) are satisfied.

*2. Distinctions between the present invention and the prior art*

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Applicants respectfully submit that each and every element of the present claims is not expressly or inherently described by the prior art. The prior art does not disclose or suggest a fatty acid ester of polyglycerol with the combination of elements (1), (2), and (3) recited in claim 1. Accordingly, a case of anticipation has not been made out and these rejections must be withdrawn.

Applicants submit that JP-07/308560 and JP-08/143513 do not disclose or suggest the presently claimed range of degree of esterification. Applicants submit that, calculating from the conditions of the concrete examples, the degrees of esterification disclosed by JP-07/308560 and JP-08/143513 are much lower than 60%. Hence, the present invention can not be anticipated by JP-07/308560 or JP-08/143513.

Furthermore, it is disclosed by JP-07/308560 at paragraphs [0001], [0034], and JP-08/143513 at, for example, paragraphs [0001] and [0037] that the fatty acid esters of polyglycerols are used as surfactants. There is neither a disclosure nor suggestion that the fatty acid esters are good for improving water-holding property. Therefore, the fact that the excellent water-holding property can be attained by the specific range of degree of esterification, i.e. 60-90%, is not disclosed or suggested by JP-07/308560 or JP-08/143513.

In JP-08/217723, fatty acid esters of polyglycerol, such as decaglycerin are disclosed. See e.g., Table 1. JP-08/217723 also discloses that the degree of esterification should be 40 mol% or

more. See e.g., claim 1. JP-08/217723 does not properly disclose using a branched fatty acid. See e.g., the JP-08/217723 working examples. There is therefore no disclosure or suggestion that a branched fatty acid should be used over a straight chain fatty acid. Accordingly, JP-08/217723 does not expressly or inherently disclose all of the elements of the present invention.

JP-08/217723 also does not disclose or suggest the presently claimed range of 60-90%. Applicants note that the result of the case having the degree of esterification within the range (only one example, (example 8), the degree being 64%) is not superior to the cases having the degree of esterification lower than 60% and the cases having the degree of esterification higher than 90%. This is a result of the fact that JP-08/217723 does not disclose or suggest the presently claimed combination of elements (1), (2), and (3) as discussed above.

Furthermore, JP-08/217723 at, for example, paragraph [0021] describes that the fatty acid esters of polyglycerol can be used as surfactants, but there is no disclosure or suggestion that the fatty acid esters are good for improving the water-holding property. Accordingly, the prior art does not disclose or suggest a fatty acid ester of polyglycerol comprising the elements (1), (2) and (3) described above and recited in claim 1. The prior art does not disclose or suggest that the presently claimed fatty acid ester of polyglycerol should be used. Therefore, the present invention is not anticipated by the prior art, and is also not obvious over the prior art. Applicants submit that all three prior art rejections must therefore be withdrawn.

### *Claim 2*

The invention of claim 2 further recites an acid value being 3 or less. As made clear by the results shown in the attached Declaration, the acid value recited in claim 2 gives lower odor

intensity. There is no disclosure or suggestion of anything regarding odor in the prior art. Accordingly, applicants respectfully submit that this element of the claims is not disclosed or suggested by the prior art.

*Claims 3 and 4*

The inventions of claims 3 and 4 are directed to cosmetics containing a fatty acid ester of polyglycerol of claim 1 or 2. Since a fatty acid ester of polyglycerol of claim 1 or 2 is not anticipated by, nor obvious over, the prior art, applicants respectfully submit that claims 3 and 4 are patentable over the prior art as well.

*Claims 5 to 13*

Claims 5 to 13 are directed to special types of cosmetics containing a fatty acid ester of polyglycerol of claim 1. Applicants note that the fatty acid ester is used as oily raw materials of cosmetics, and not as a surfactant. From the presently claimed esterification products (the fatty acid ester), cosmetics having high moisture retention properties can be prepared. See e.g., specification, *paragraph [00093]*. The cosmetics of claims 5 to 13 are superior to cosmetics that do not contain the fatty acid ester of polyglycerol recited in claim 1. The presently claimed cosmetics are superior in wet feel, and offer smooth feeling without an oily feeling. This is described in the present specification at *paragraphs [00053]-[0092]*, particularly lines 1-7 of *paragraph [00092]*.

Applicants note that the prior art does not describe the presently claimed cosmetics which have good wet feeling and smooth feeling. The particular cosmetics comprising the fatty acid

esters of the present invention comprise a combination of elements that is not disclosed or suggested by the prior art. Accordingly, the presently claimed cosmetics are novel and patentable over prior art compositions.

Further, the above mentioned superior effects of the present invention are not suggested by the prior art. The prior art only discloses using fatty acid esters as surfactants, and the required functions and properties for surfactants are different from those of cosmetics. The prior art does not disclose or suggest improved water-holding properties, and therefore the present compositions are not obvious over the prior art. Applicants respectfully submit that based on the amendments and arguments presented above the present application is in condition for allowance. An early reconsideration and Notice of Allowance are respectfully requested.

### Conclusion

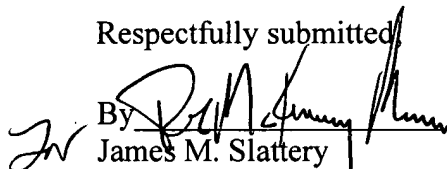
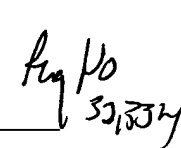
In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Konieczny, Reg. No. 47,715 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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*J.M.S.*

Attachment: Declaration under 37 C.F.R. §1.132